APPENDIX REPORT

Project No.	SHT2108128604EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT2107089006	Model No.	TS-61
Start test date	2021-09-06	Finish date	2021-09-06
Temperature	26.1℃	Humidity	35%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhao

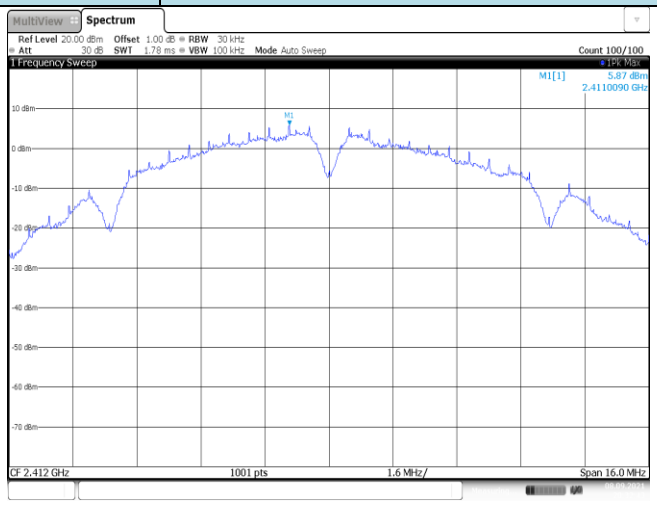
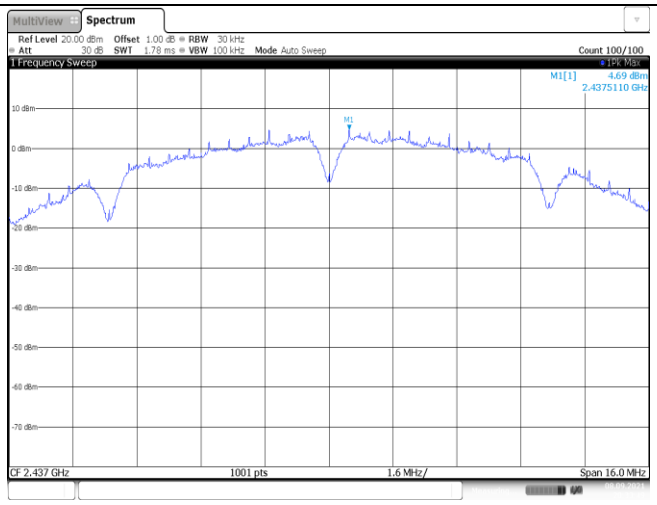
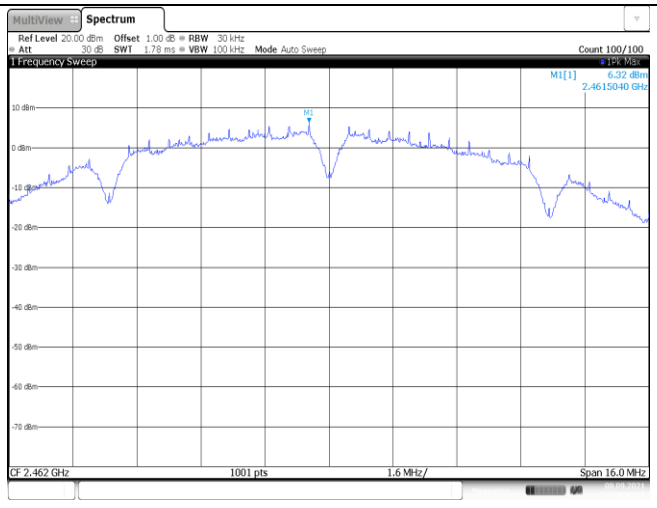
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

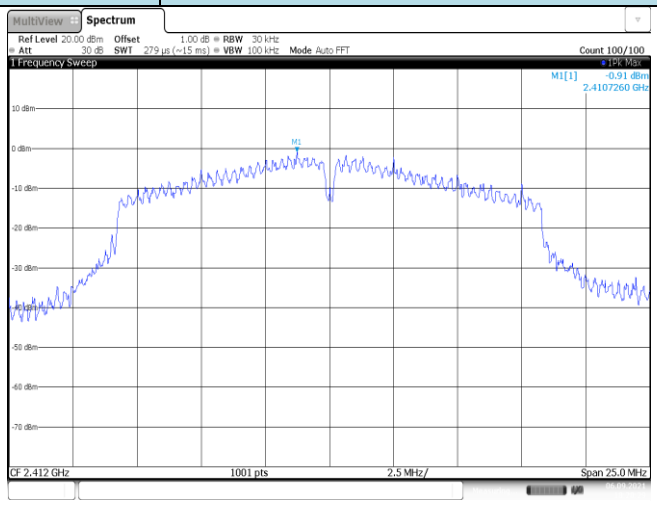
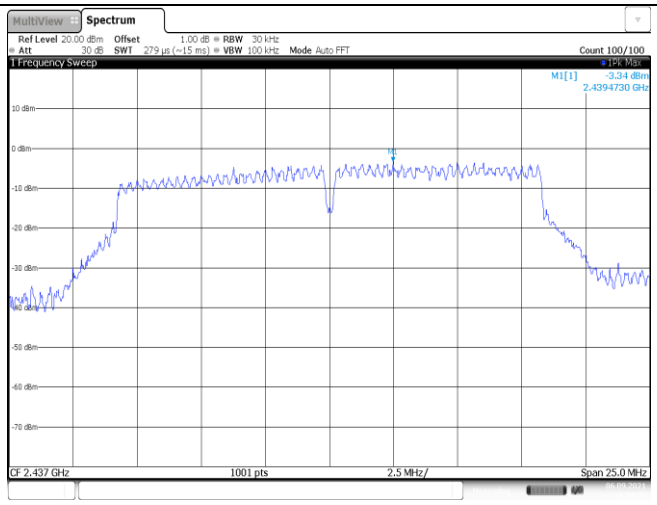
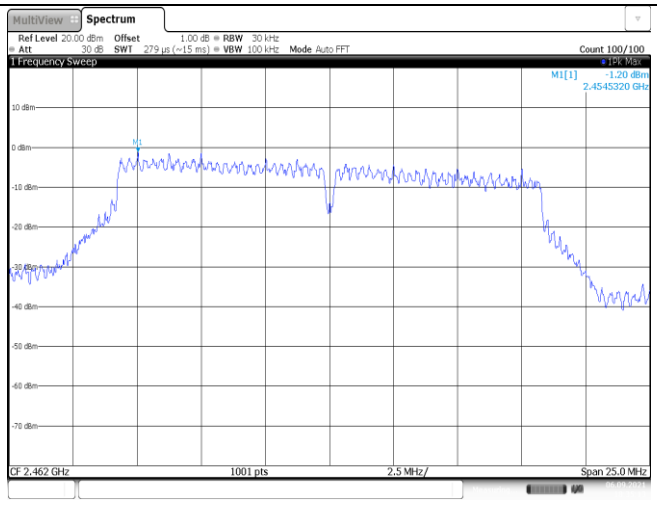
Appendix A：Conducted Peak Output Power

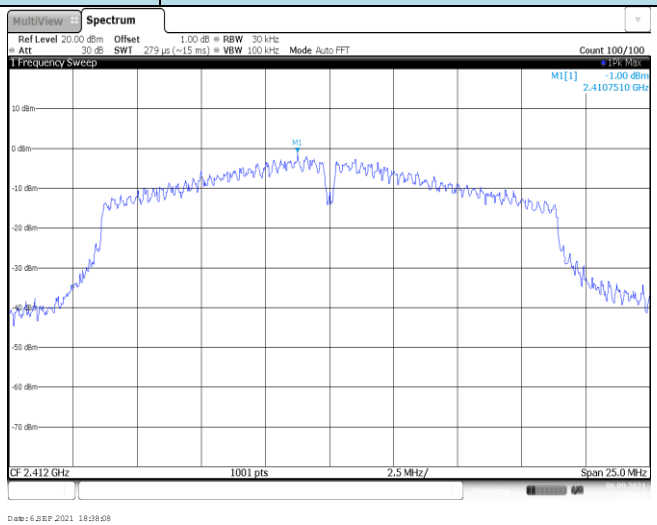
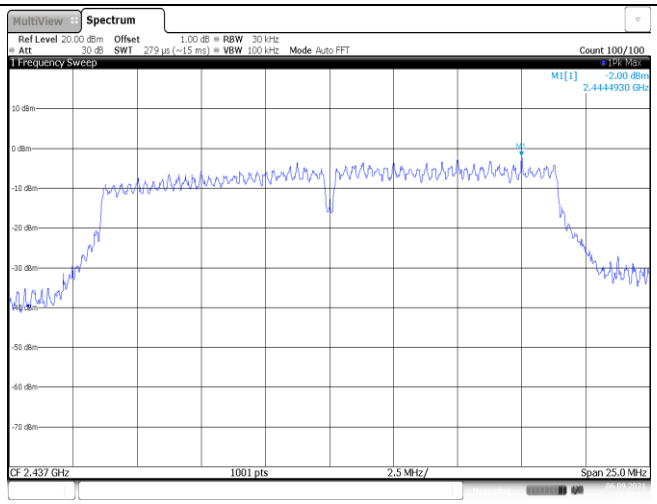
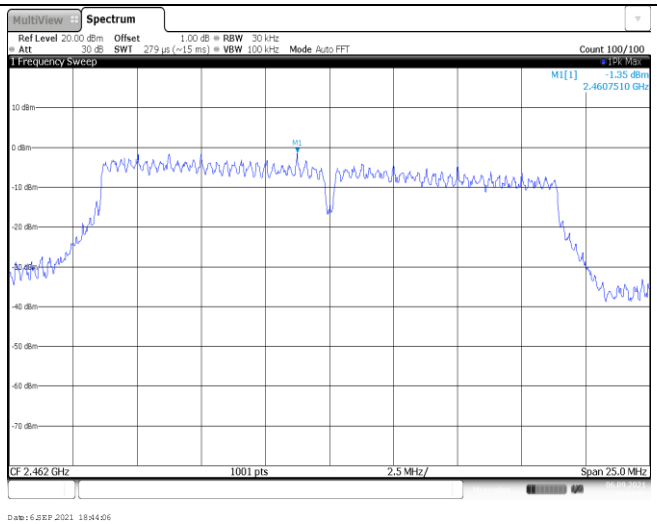
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	18.30	15.91	≤ 30.00	Pass
	06	17.86	15.42		
	11	18.65	16.21		
802.11g	01	21.19	18.63	≤ 30.00	Pass
	06	21.04	18.58		
	11	21.50	18.92		
802.11n (HT20)	01	21.11	18.68	≤ 30.00	Pass
	06	21.00	18.56		
	11	21.42	18.84		
802.11n(HT40)	03	20.23	17.54	≤ 30.00	Pass
	06	20.44	17.84		
	09	21.67	19.05		

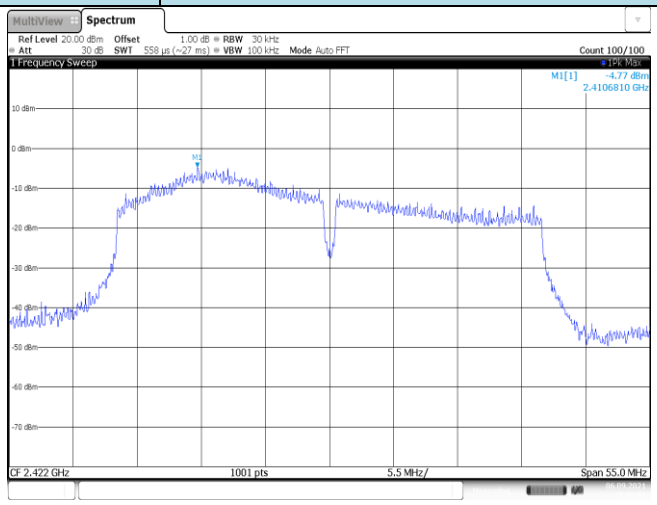
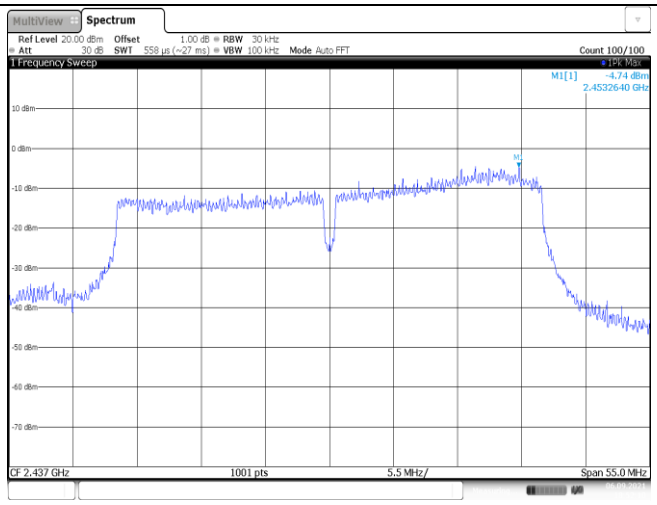
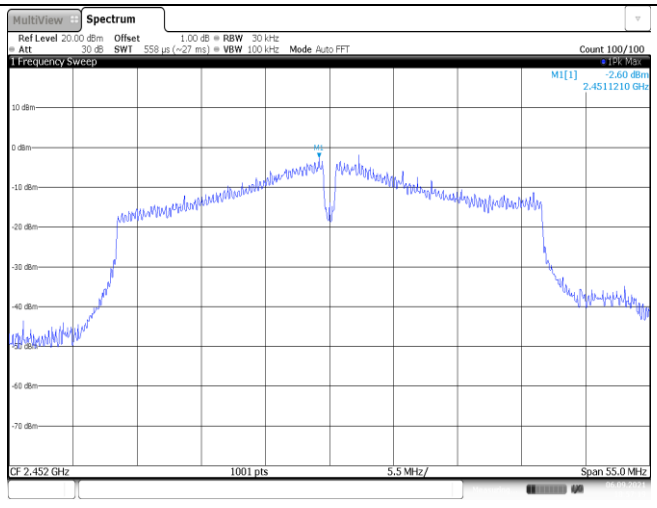
Appendix B：Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	5.87	≤8.00	Pass
	06	4.69		
	11	6.32		
802.11g	01	-0.91	≤8.00	Pass
	06	-3.34		
	11	-1.20		
802.11n(HT20)	01	-1.00	≤8.00	Pass
	06	-2.00		
	11	-1.35		
802.11n(HT40)	03	-4.77	≤8.00	Pass
	06	-4.74		
	09	-2.60		

Type:	802.11 b
CH01	
CH06	
CH11	

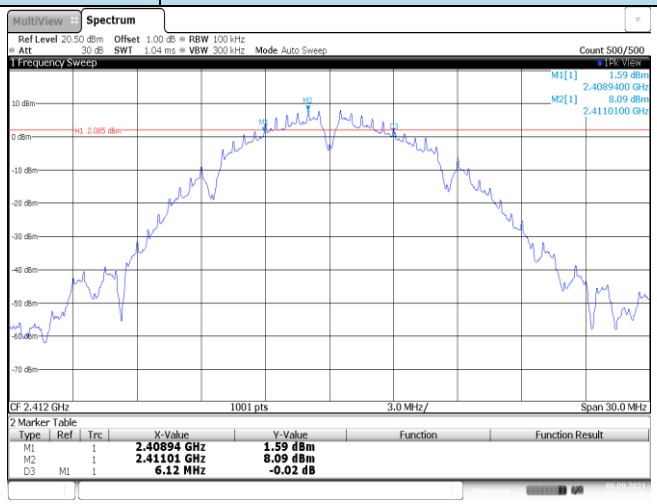
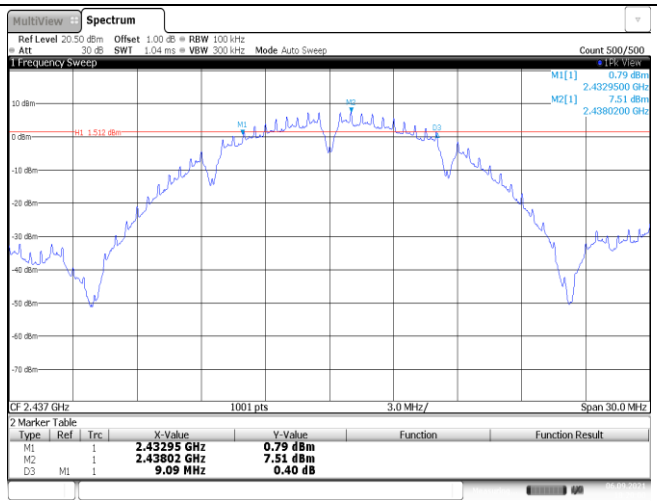
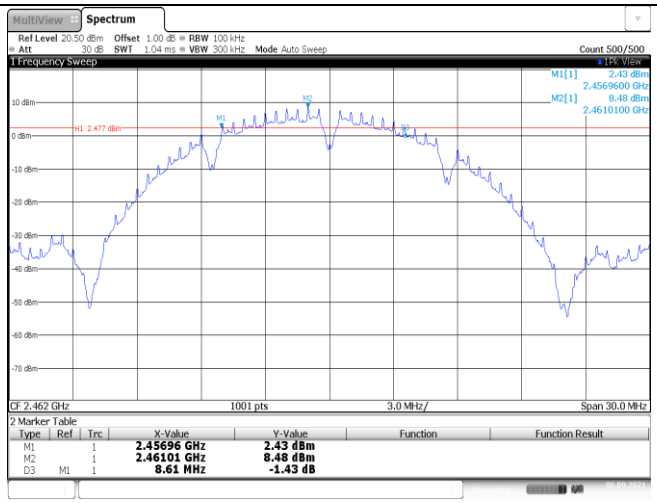
Type:	802.11 g
CH01	
CH06	
CH11	

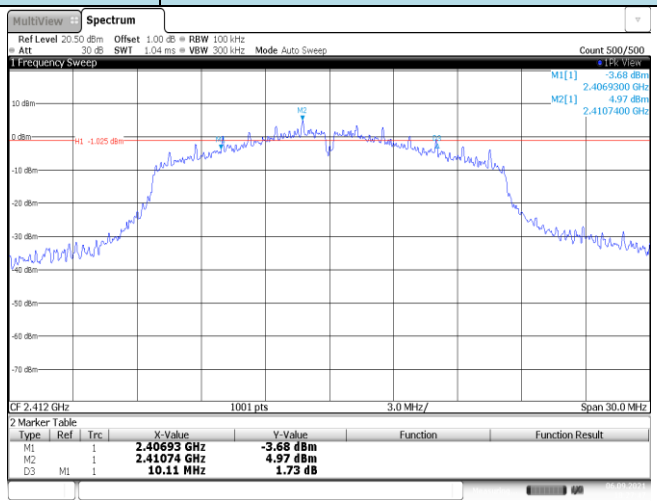
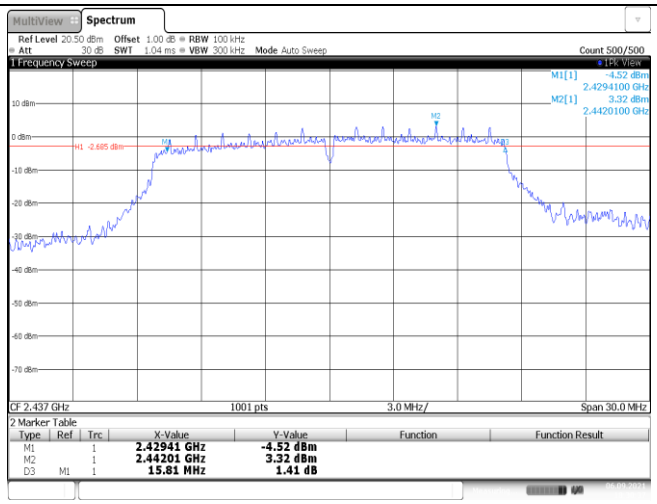
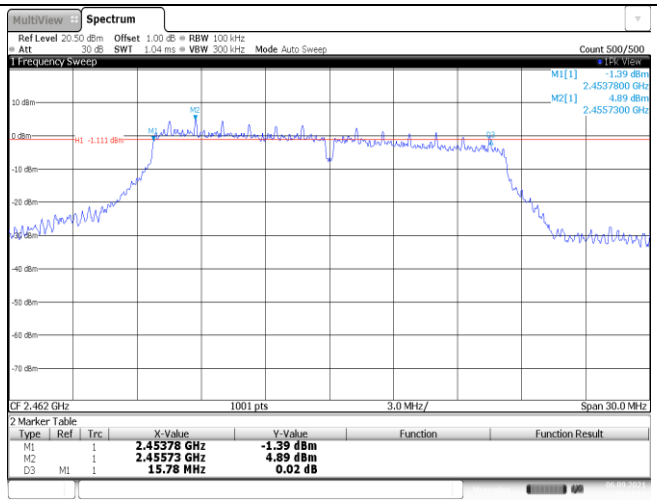
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

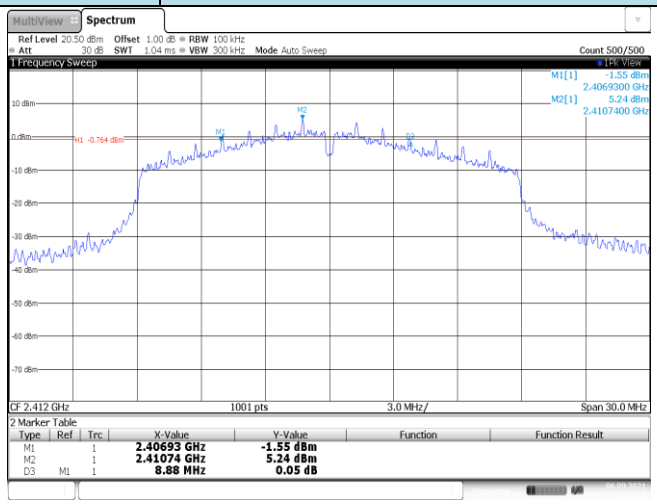
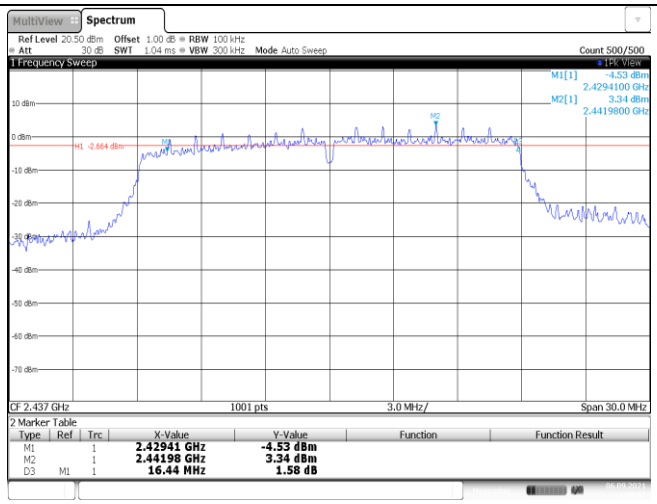
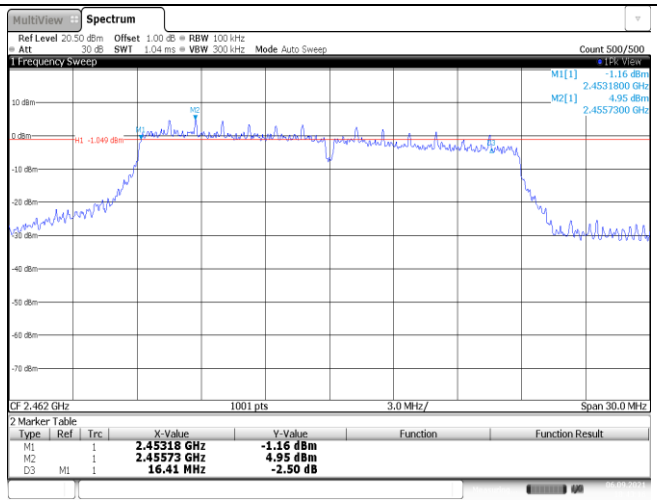
Type:	802.11n(HT40)
CH03	
CH06	
CH09	

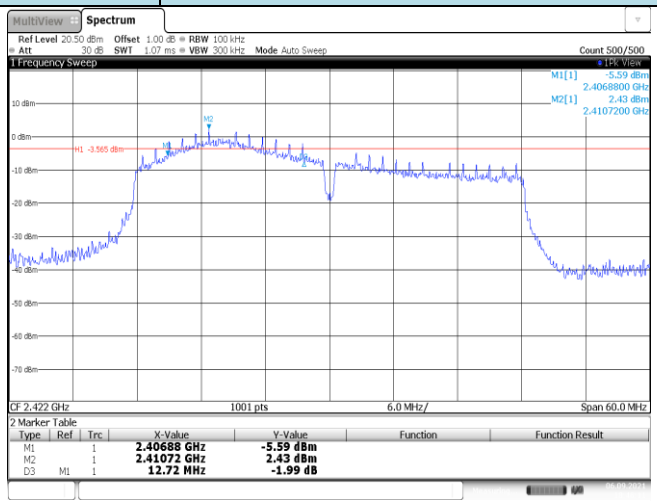
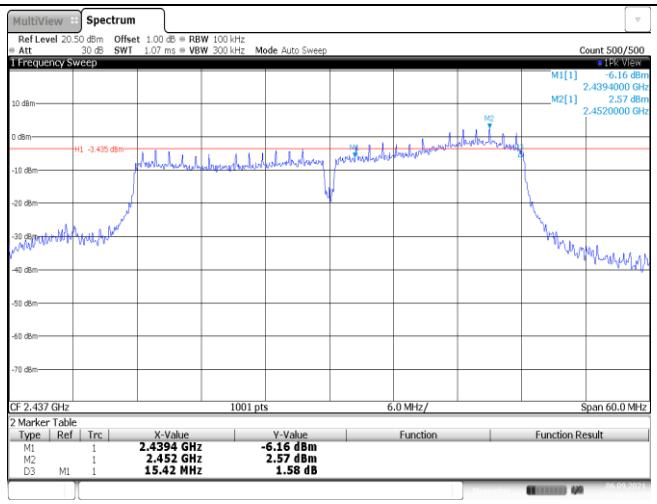
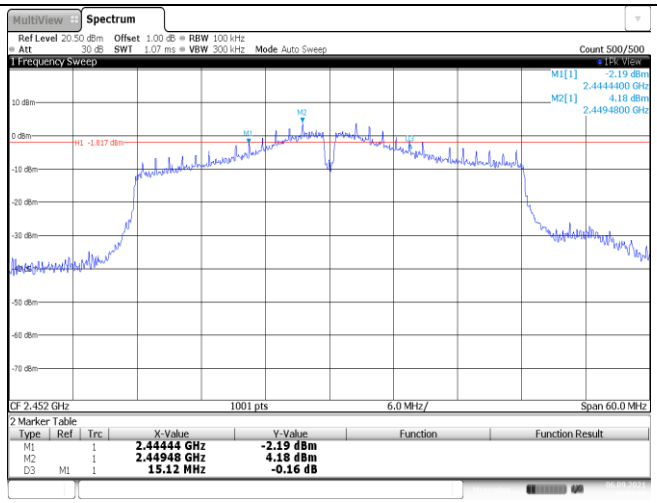
Appendix C：6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	6.12	≥0.5	Pass
	06	9.09		
	11	8.61		
802.11g	01	10.11	≥0.5	Pass
	06	15.81		
	11	15.78		
802.11n(HT20)	01	8.88	≥0.5	Pass
	06	16.44		
	11	16.41		
802.11n(HT40)	03	12.72	≥0.5	Pass
	06	15.42		
	09	15.12		

Type:	802.11 b
CH01	
CH06	
CH11	

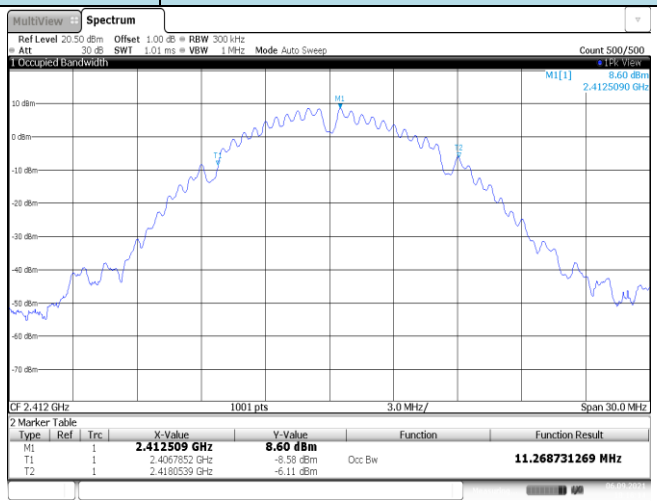
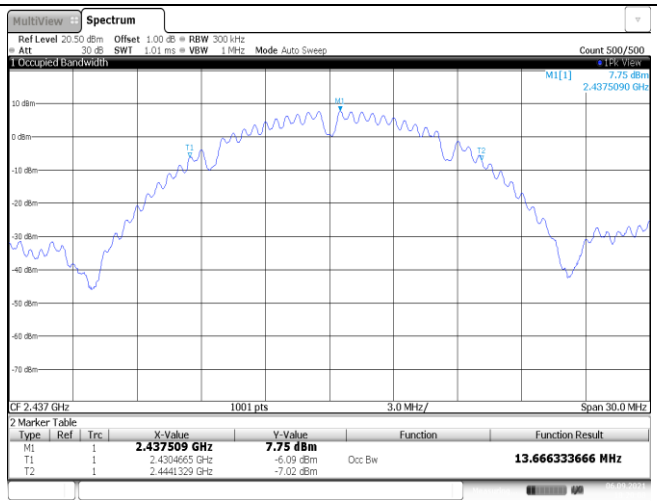
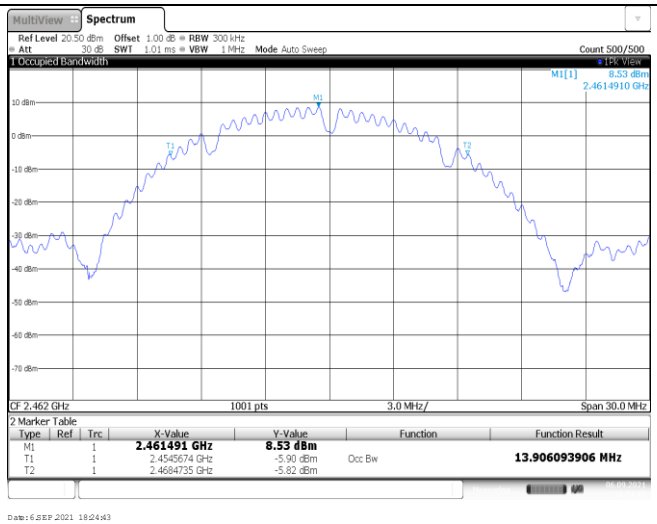
Type:	802.11 g
CH01	
CH06	
CH11	

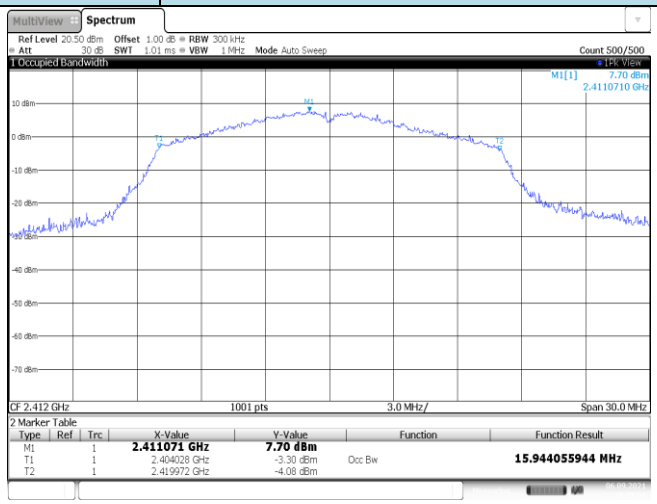
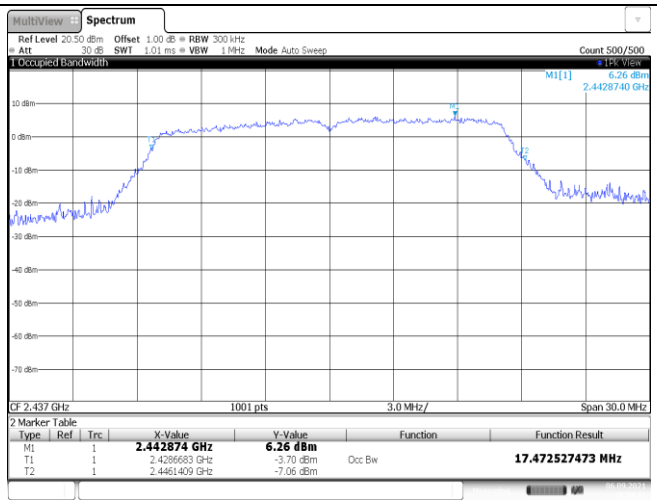
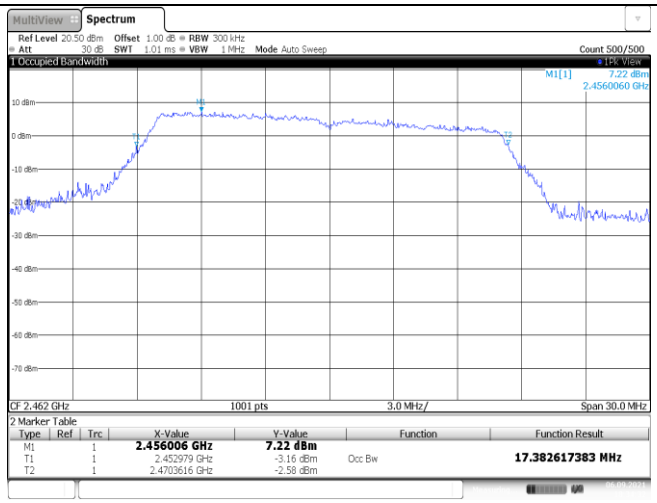
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

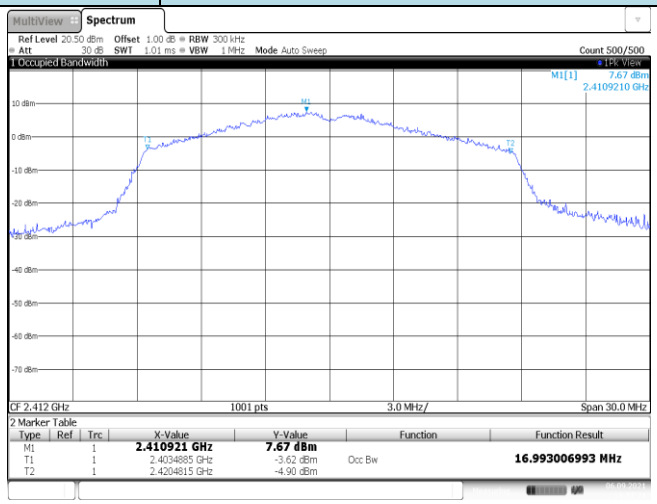
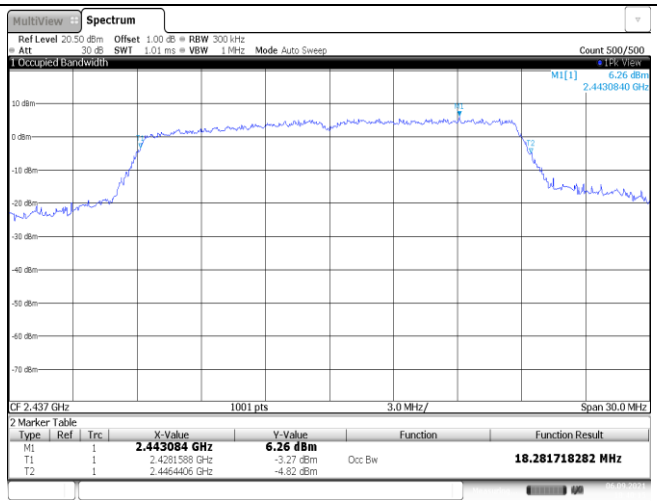
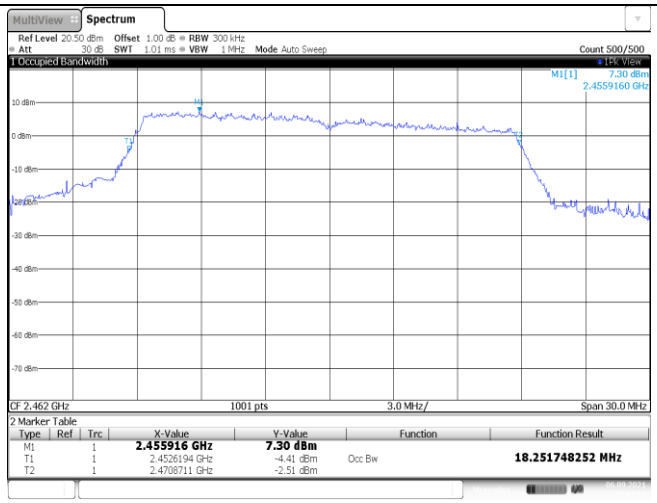
Type:	802.11n(HT40)
CH03	
CH06	
CH09	

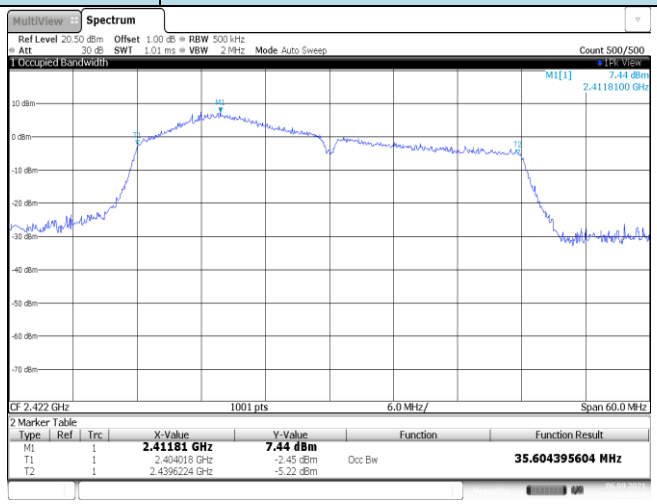
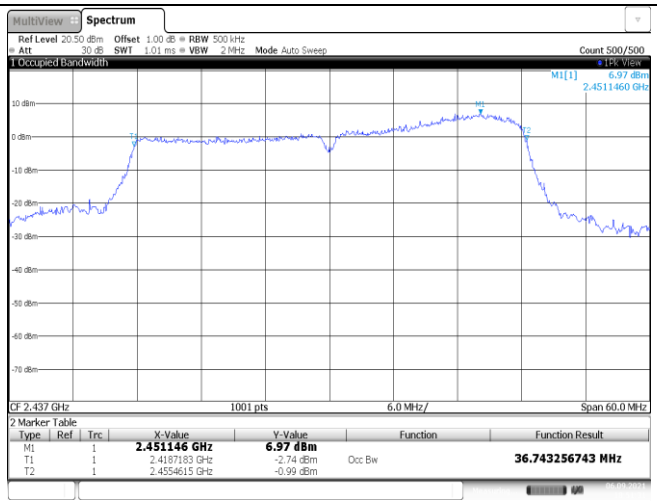
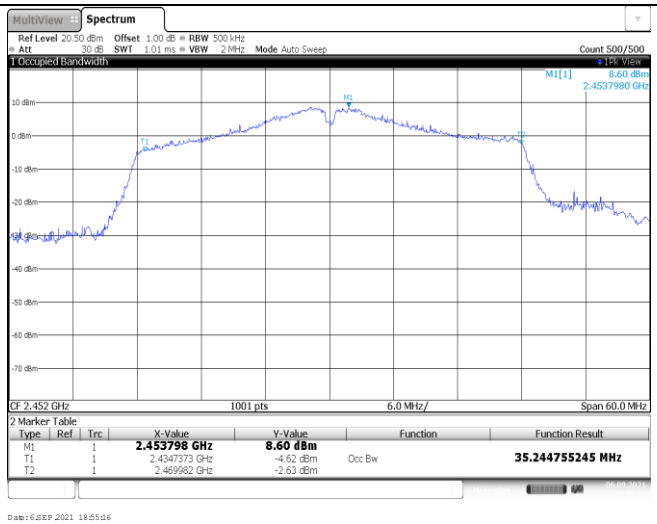
Appendix D：99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	11.27	-	Pass
	06	13.67		
	11	13.91		
802.11g	01	15.94	-	Pass
	06	17.47		
	11	17.38		
802.11n(HT20)	01	16.99	-	Pass
	06	18.28		
	11	18.25		
802.11n(HT40)	03	35.60	-	Pass
	06	36.74		
	09	35.24		

Type:	802.11 b
CH01	
CH06	
CH11	

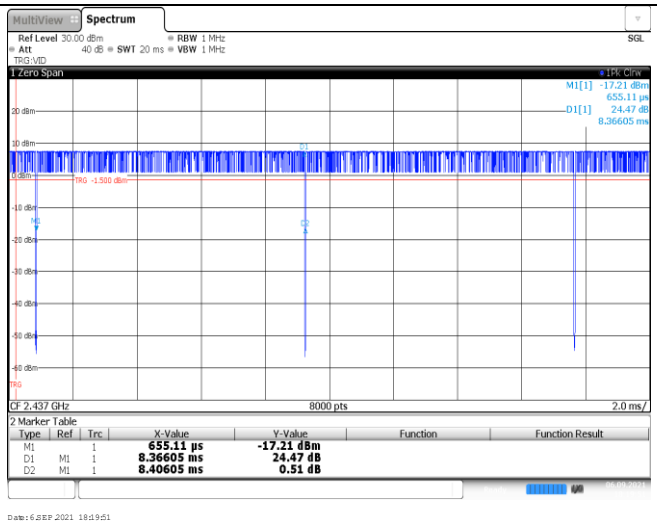
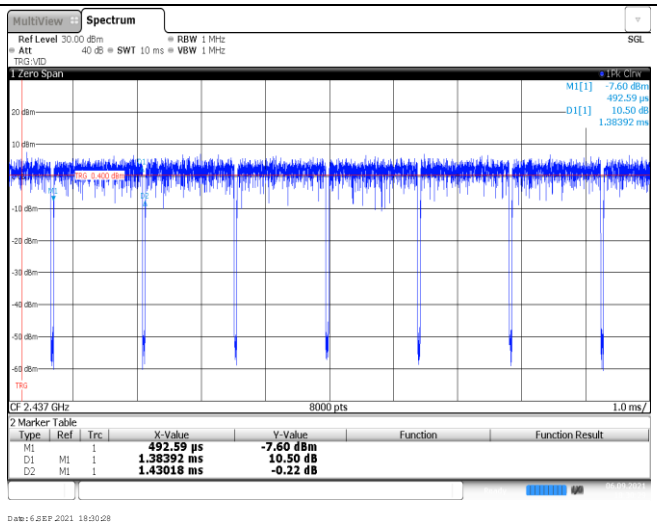
Type:	802.11 g
CH01	
CH06	
CH11	

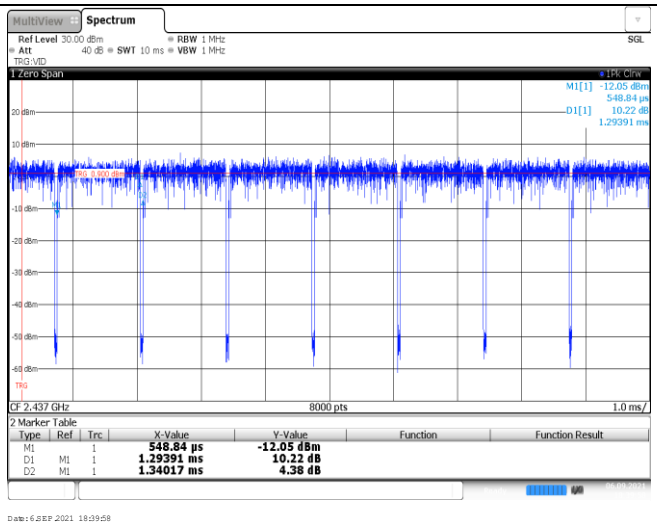
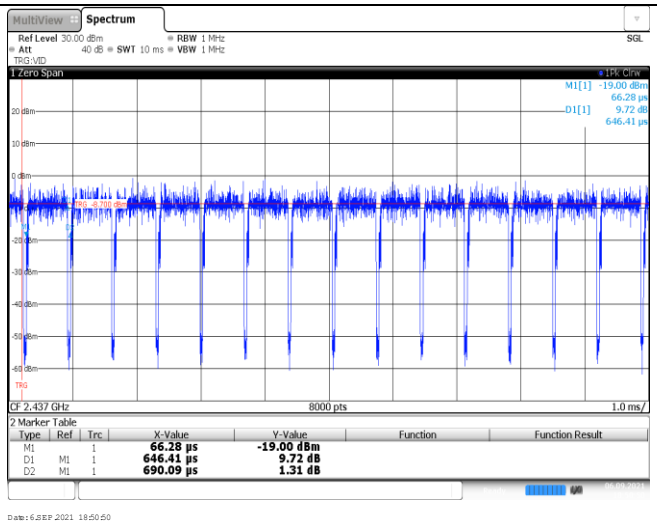
Type:	802.11n(HT20)
CH01	
CH06	
CH11	

Type:	802.11n(HT40)
CH03	
CH06	
CH09	

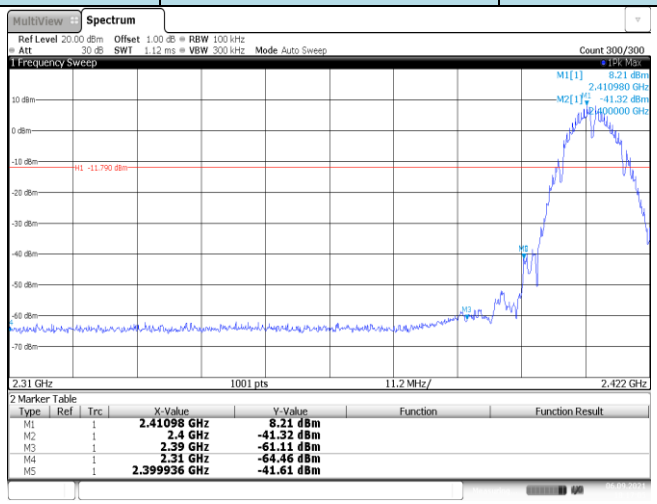
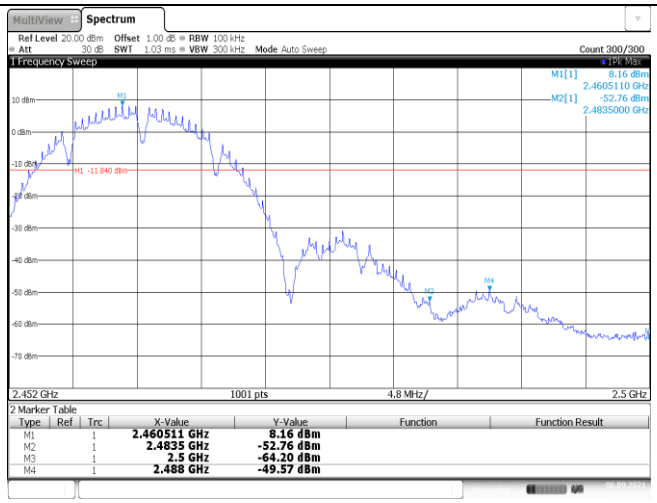
Appendix E：Duty Cycle

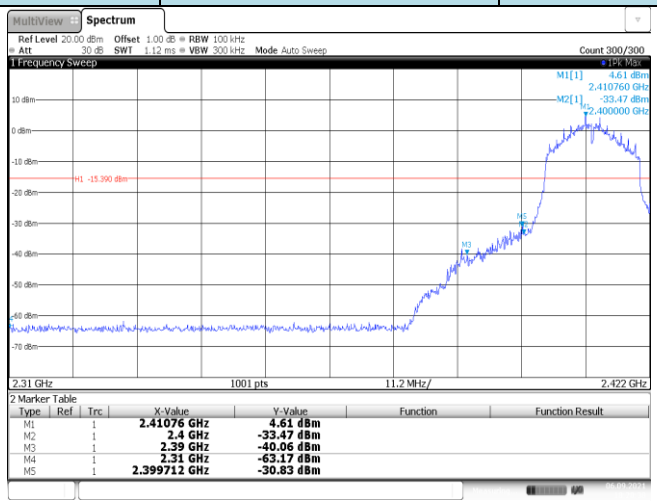
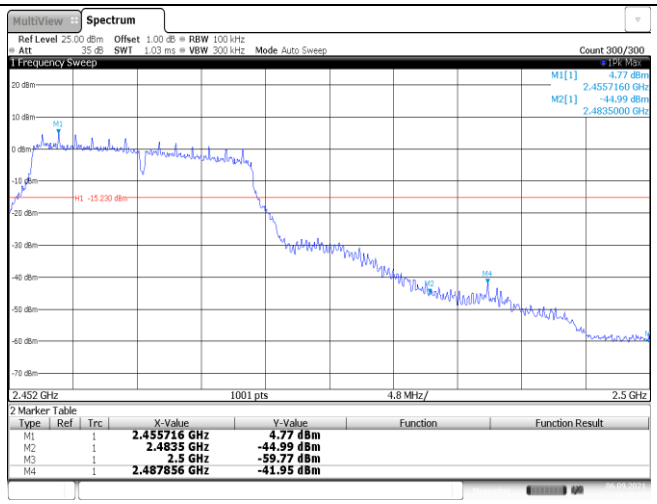
Modulation Type	Test Frequency （MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
11b	2437	8.37	8.41	99.5%	0.1
11g	2437	1.38	1.43	96.5%	0.7
11n20	2437	1.29	1.34	96.3%	0.8
11n40	2437	0.65	0.69	94.2%	1.5

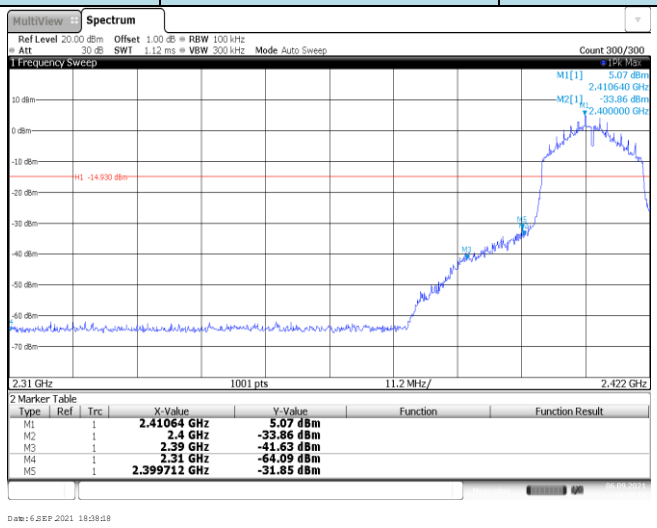
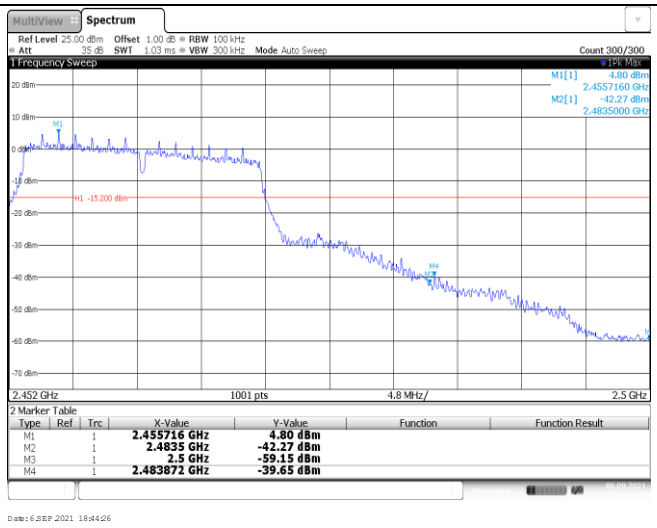
11b	
11g	

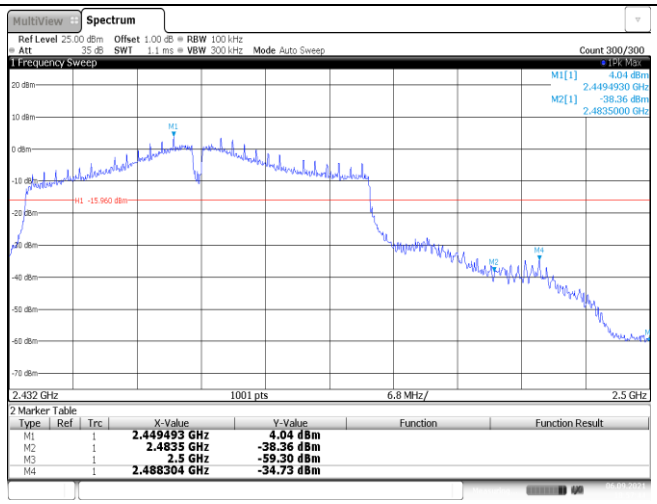
11n20	 MultiView Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz SGL TRG:VID 1 Zero Span 1Pk Clrw M1[1] -12.05 dBm 548.84 µs D1[1] 10.22 dB 1.29391 ms CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 548.84 µs -12.05 dBm D1 M1 1 1.29391 ms 10.22 dB D2 M1 1 1.34017 ms 4.38 dB Date: 6.SEP.2021 18:39:58
11n40	 MultiView Spectrum Ref Level 30.00 dBm RBW 1 MHz Att 40 dB SWT 10 ms VBW 1 MHz SGL TRG:VID 1 Zero Span 1Pk Clrw M1[1] -19.00 dBm 66.28 µs D1[1] 9.72 dB 646.41 µs CF 2.437 GHz 8000 pts 1.0 ms/ 2 Marker Table Type Ref Trc X-Value Y-Value Function Function Result M1 1 66.28 µs -19.00 dBm D1 M1 1 646.41 µs 9.72 dB D2 M1 1 690.09 µs 1.31 dB Date: 6.SEP.2021 18:50:50

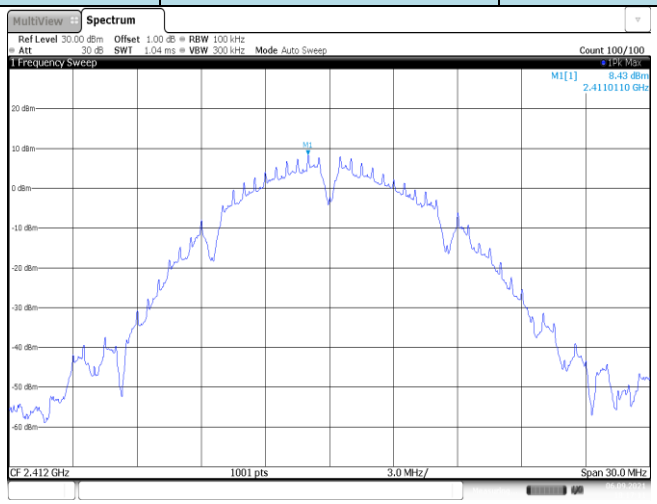
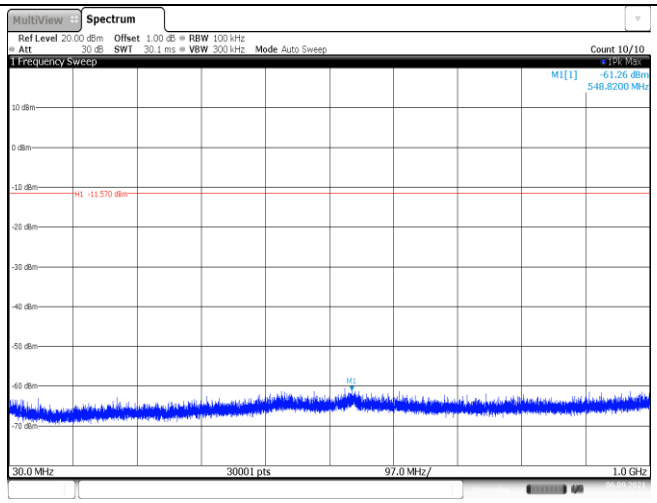
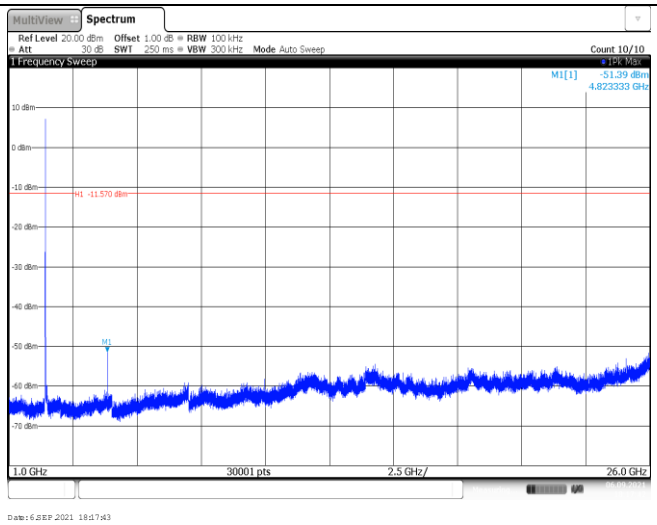
Appendix F：Band edge and Spurious Emissions (conducted)

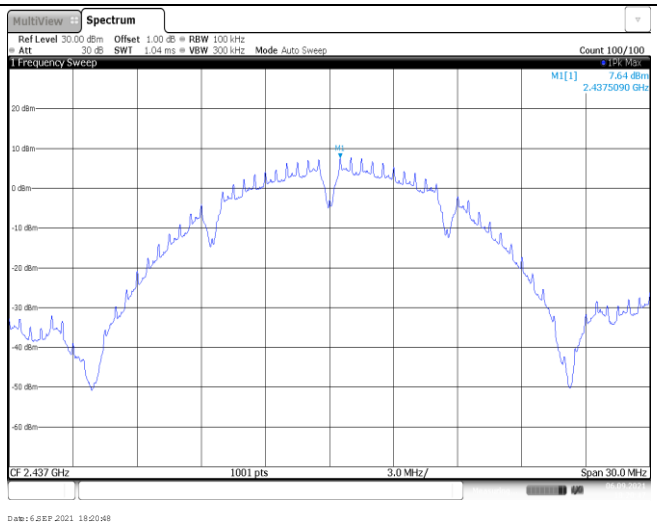
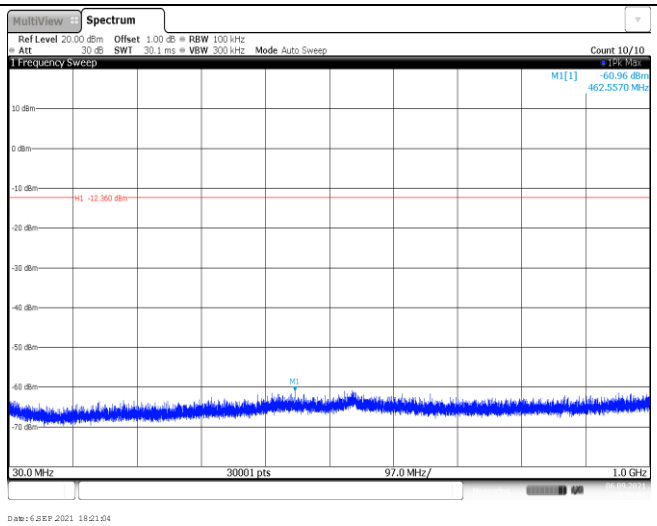
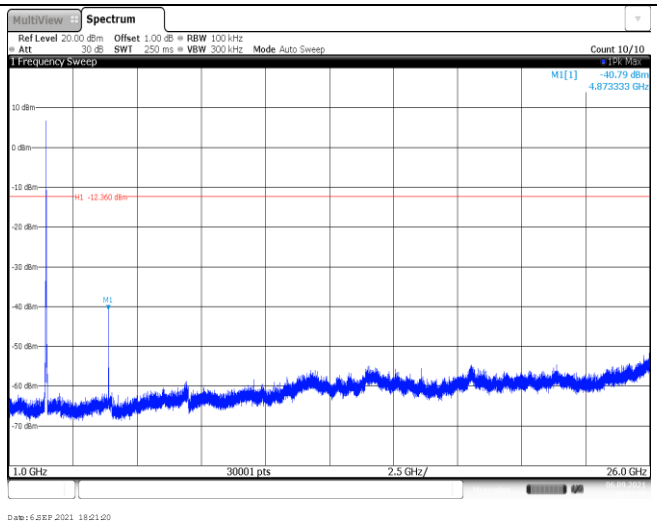
Test Item:	Bandedge	Type:	802.11 b
CH01			
CH11			

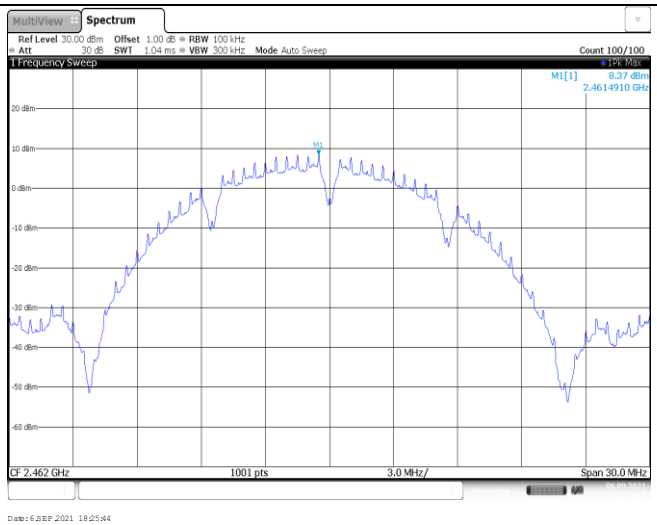
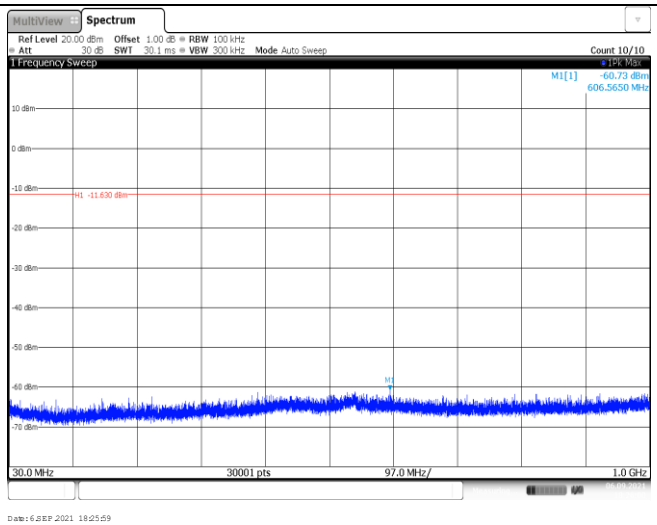
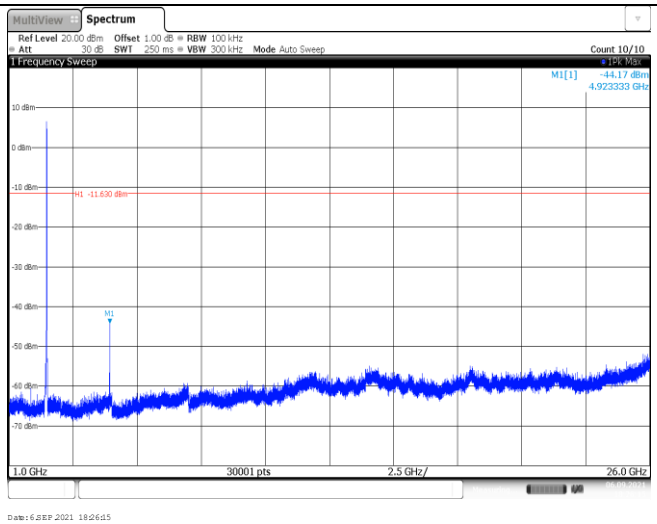
Test Item:	Bandedge	Type:	802.11 g
CH01			
CH11			

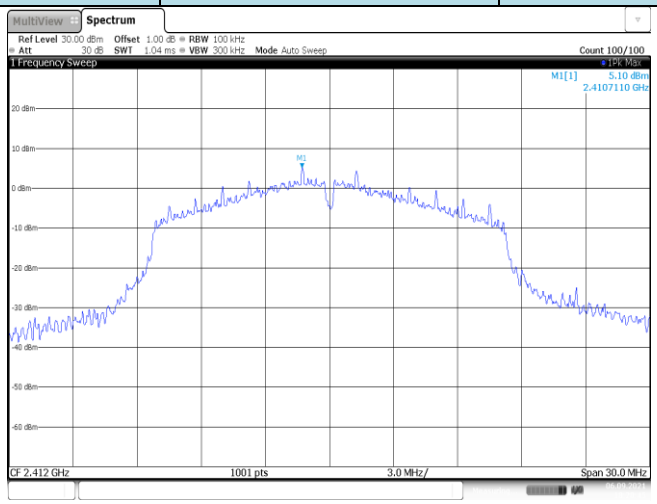
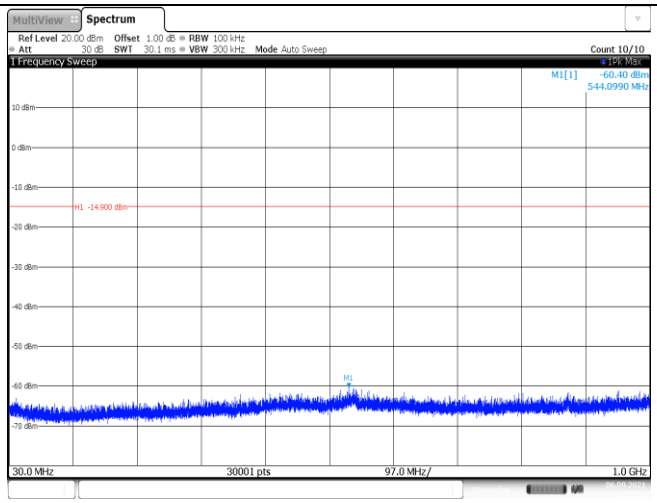
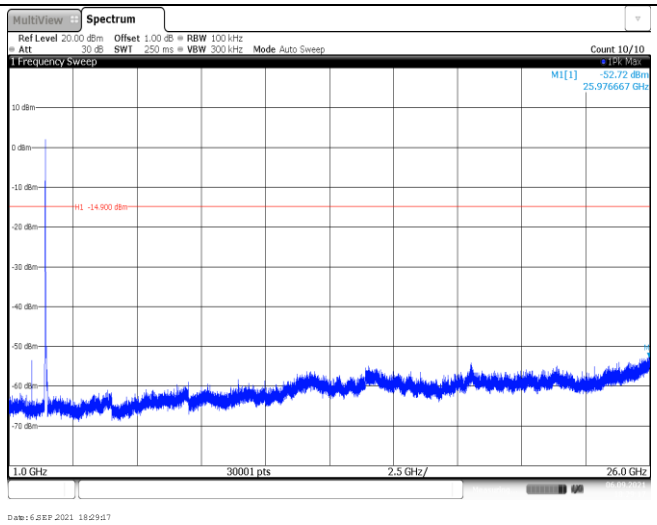
Test Item:	Bandedge	Type:	802.11 n(HT20)
CH01			
CH11			

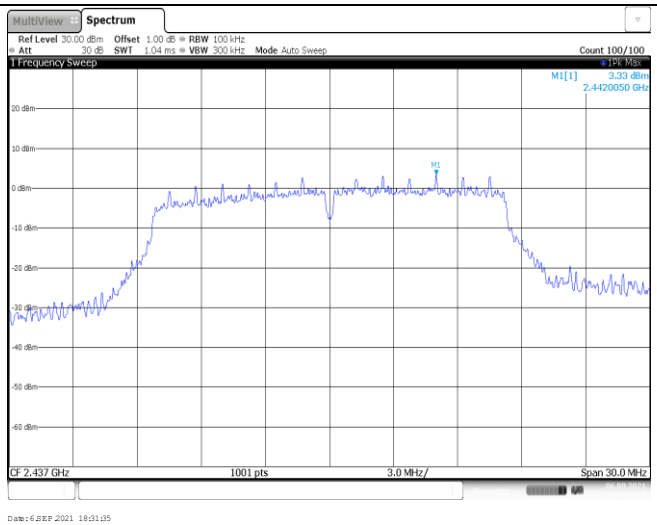
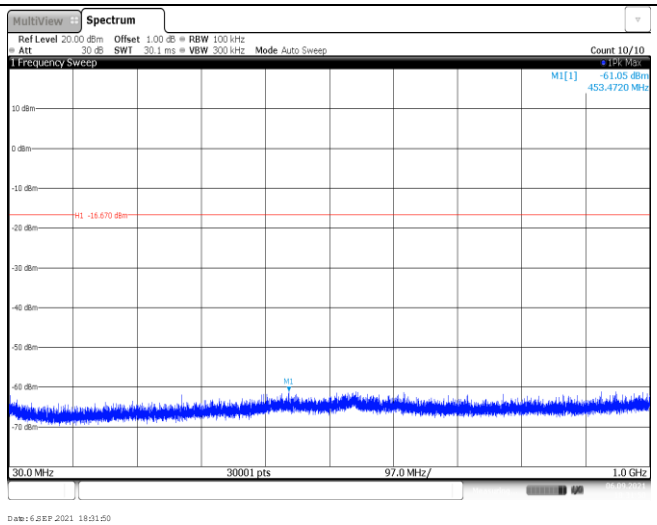
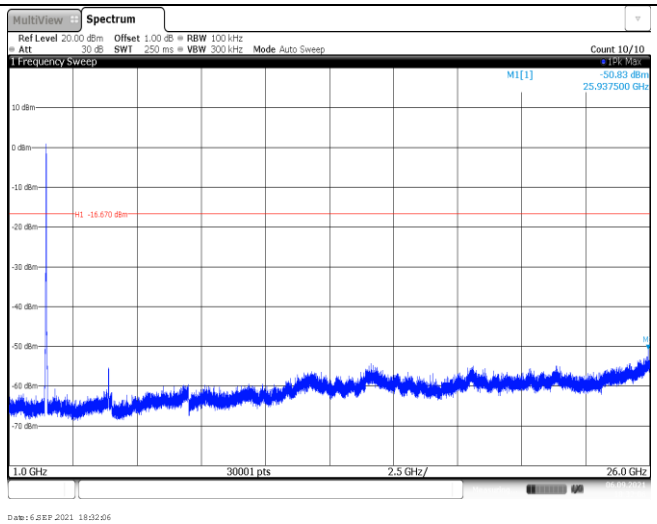
Test Item:	Bandedge	Type:	802.11 n(HT40)
CH03			
CH09			

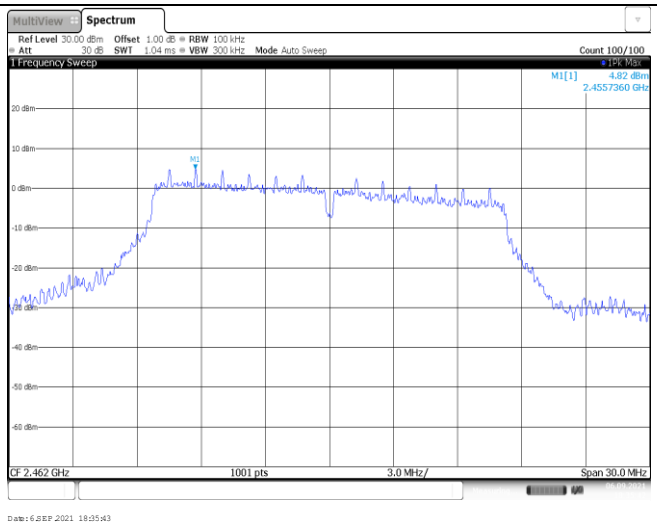
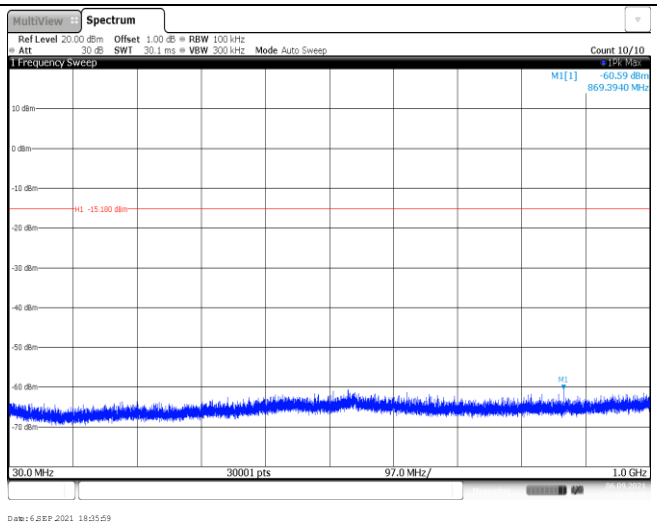
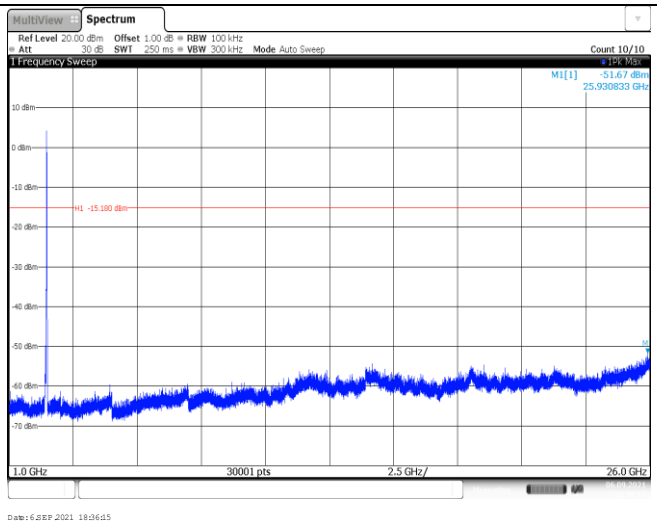
Test Item:	SE	Type:	802.11b
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

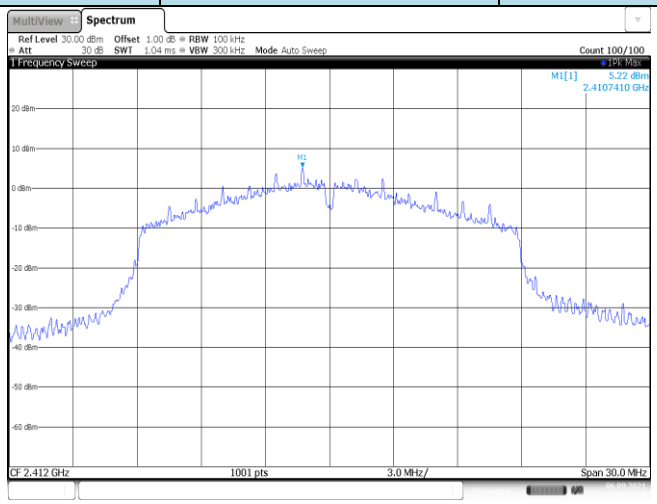
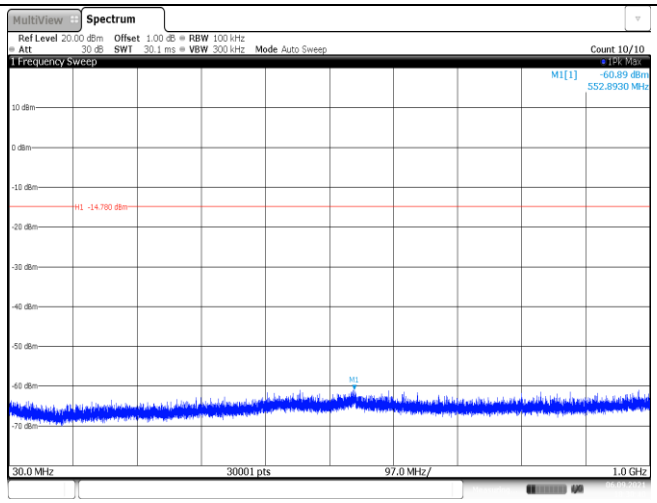
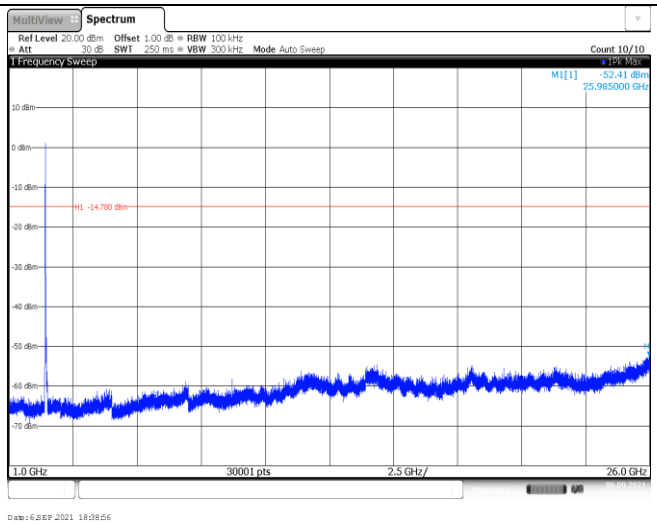
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

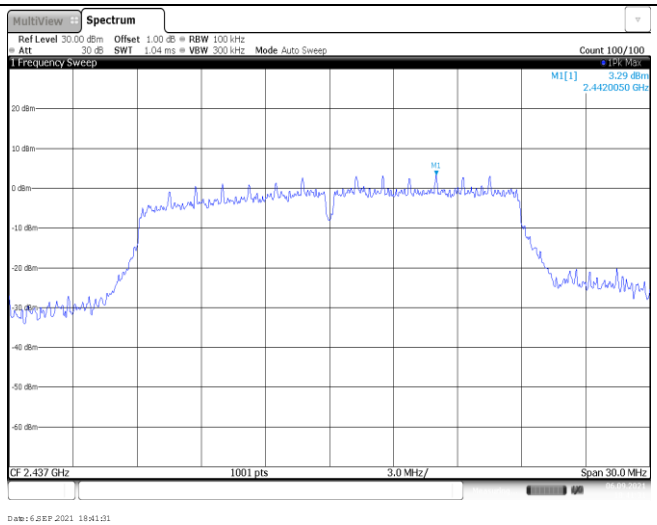
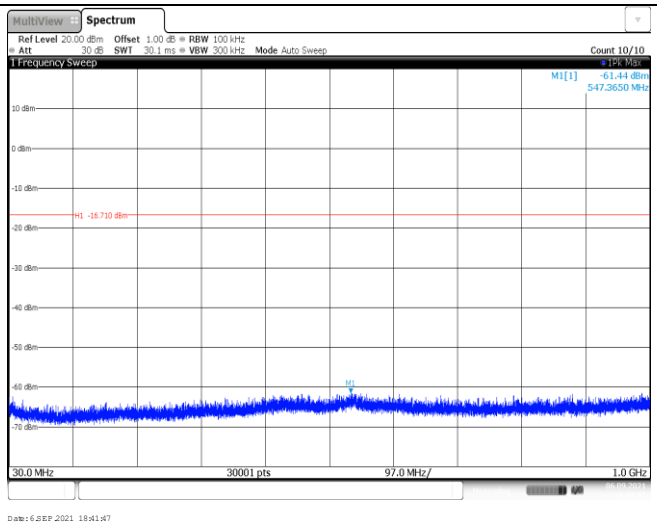
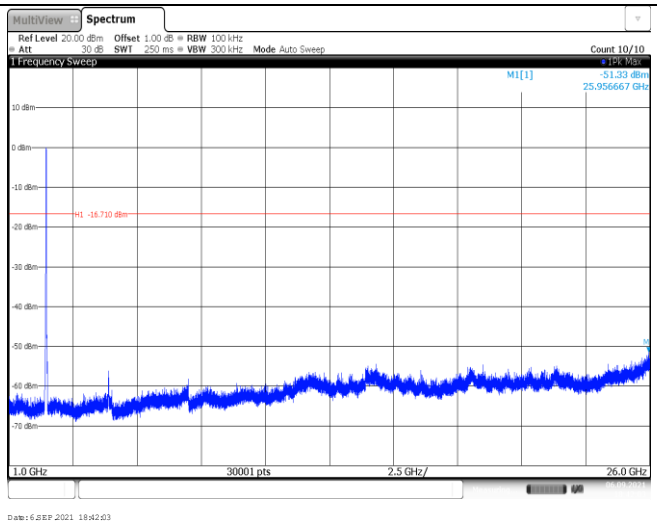
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

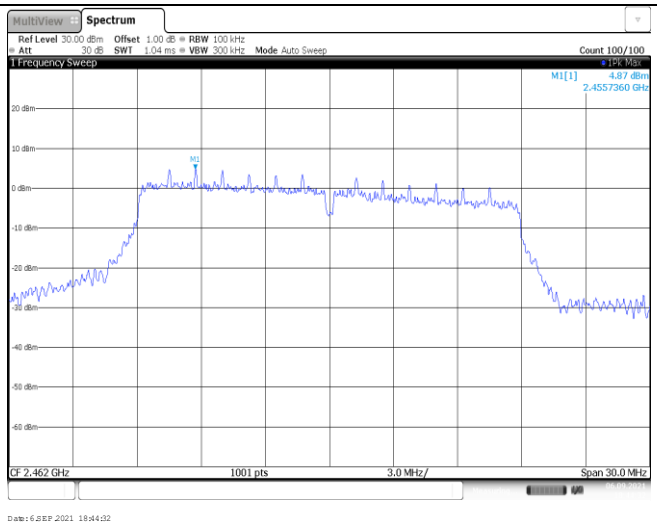
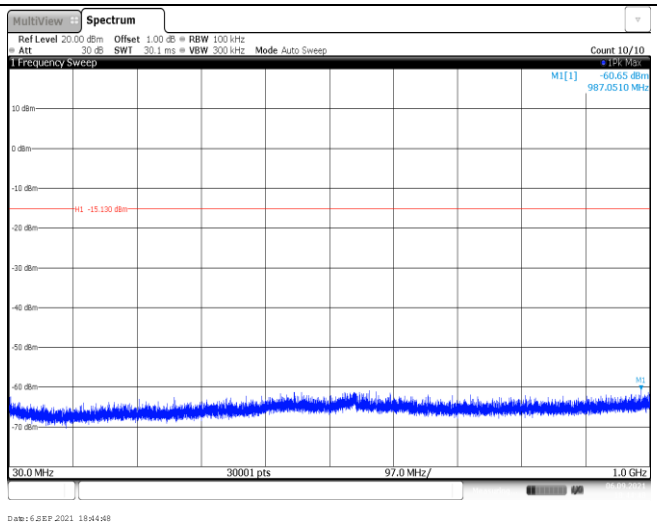
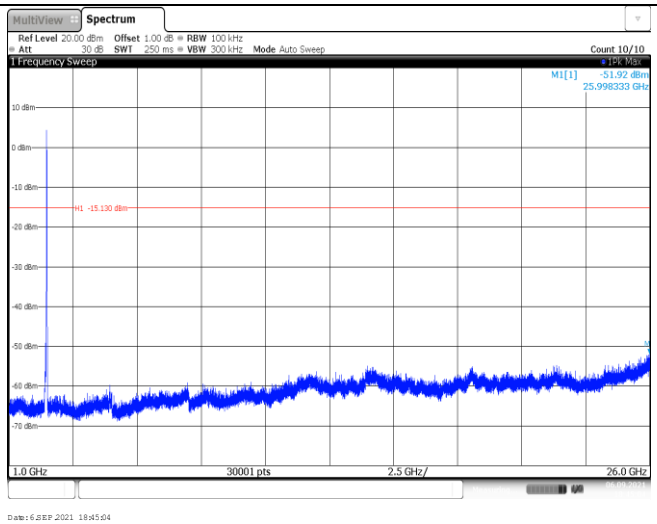
Test Item:	SE	Type:	802.11g
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

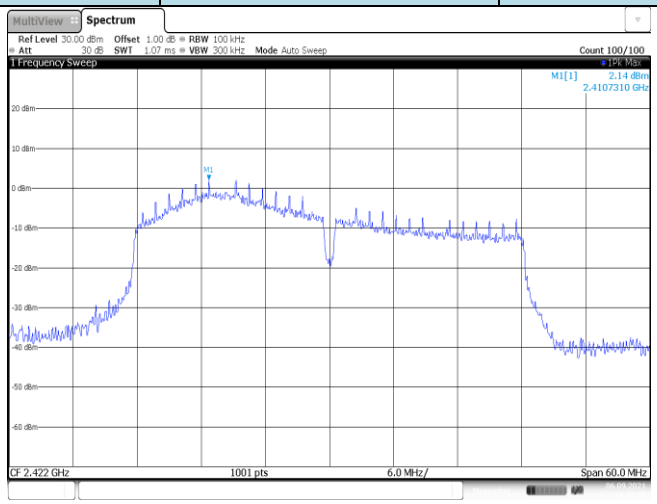
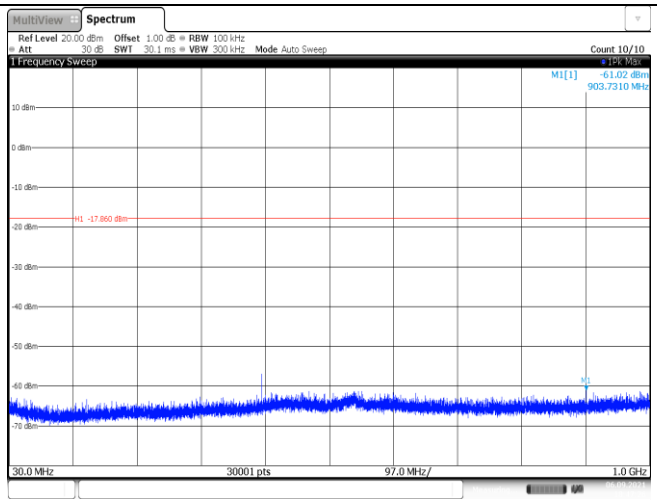
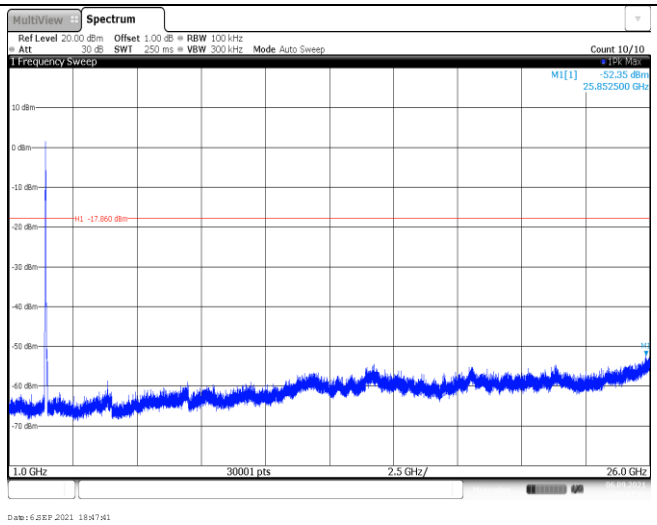
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

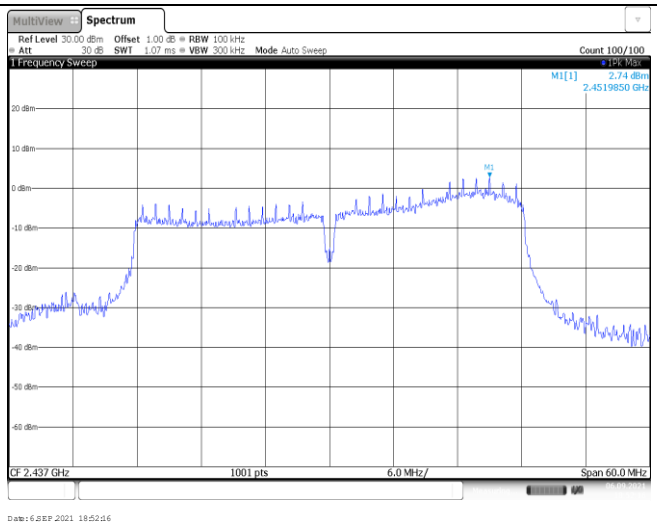
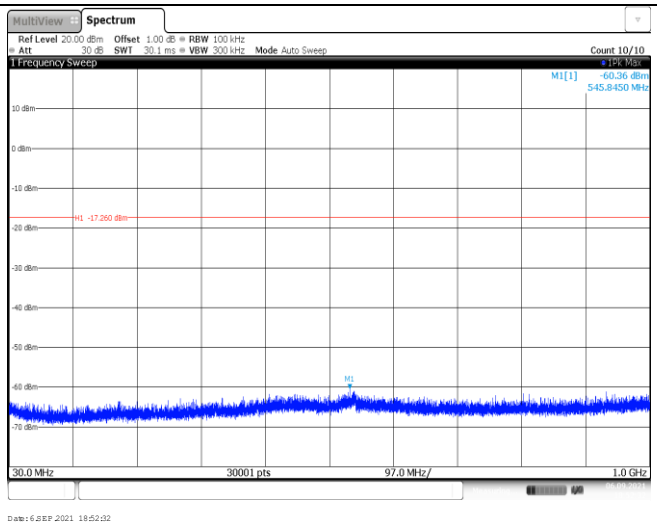
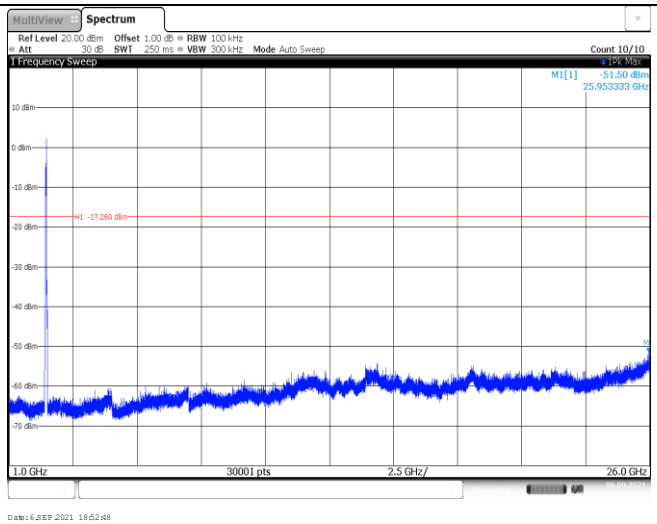
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

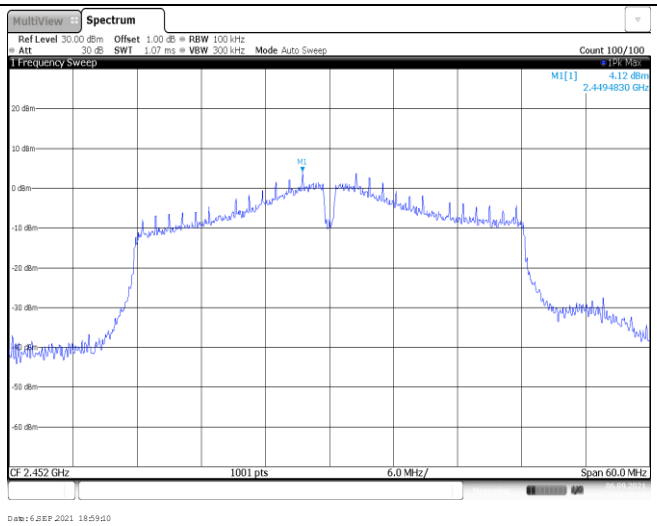
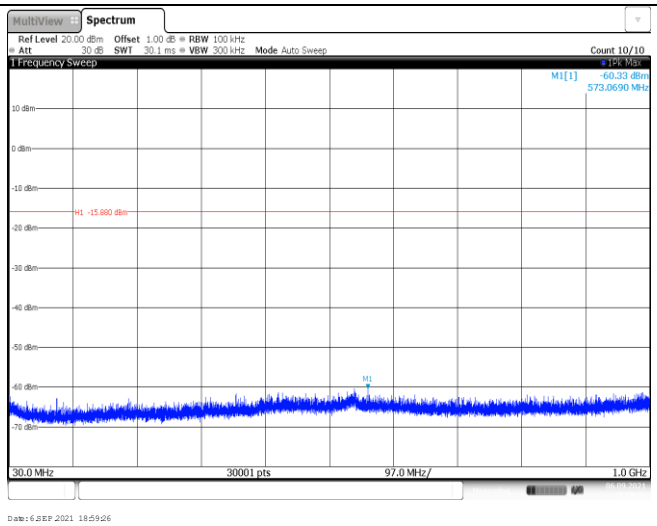
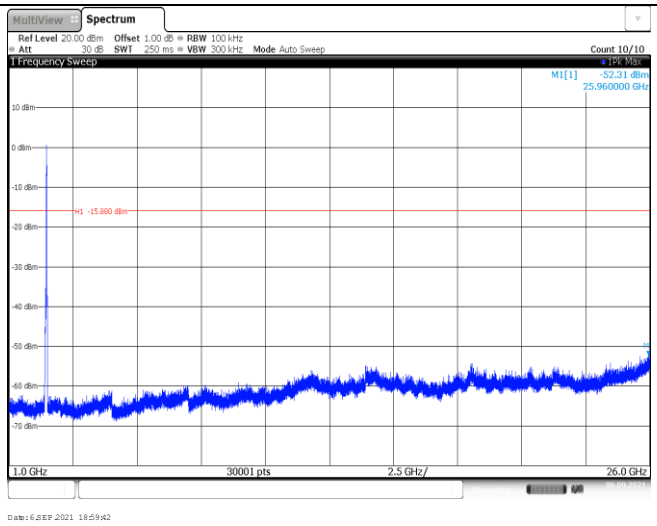
Test Item:	SE	Type:	802.11n(HT20)
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

Test Item:	SE	Type:	802.11n(HT40)
CH03 Reference level			
CH03 30MHz~1000MHz			
CH03 1GHz~26GHz			

CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

CH09 Reference level	
CH09 30MHz~1000MHz	
CH09 1GHz~26GHz	

--------End of Report--------